DOCUMENT RESUME

ED 382 966 CS 214 848

AUTHOR Vande Kopple, William J.
TITLE Some Explorations of the Synoptic and Dynamic Styles.
PUB DATE 23 Mar 95
NOTE 17p.; Paper presented at the Annual Meeting of the Conference on College Composition and Communication (46th, Washington, DC, March 23-25, 1995).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Higher Education; Linguistics; *Literacy; Remedial Instruction; Rhetorical Theory; Writing (Composition); *Writing Instruction
IDENTIFIERS Academic Discourse; *Basic Writers; Composition Theory; Halliday (M A K); *Writing Style

ABSTRACT

M. A. K. Halliday's continuum of linguistic styles or modes of representing experience employs two classifications of writing styles: (1) synoptic, and (2) dynamic. The synoptic style represents the world as a world of things, of products, of structures. This style is usually associated with carefully planned, formal writing. The chief characteristic of the style is lexical density, which is the proportion of lexical or content words to the total discourse. At the other end of Halliday's continuum is the dynamic style, which represents the world in terms of happenings, processes, and becomings. It is usually associated with speech, especially spontaneous speech. Its chief characteristic is grammatical intricacy; in other words, it contains many clauses, some hypotactically and some paratactically related to others. A study of student writing in two sections (34 students) of basic writing taught at a four-year college found that many of the sentences in this sample demonstrated a complexity typical of neither dynamic nor synoptic styles but that when some complexity was present it was usually the dynamic sort. This preliminary work raises the possibility that some college students, without kinds of special help, will not be able to move very far along the stylistic continuum toward the synoptic style in their writing. These results justify thinking on the part of literacy scholars about what might allow students to do the kind of scholarly work that seems to correlate highly with the synoptic style. (Contains 14 references.) (TB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 382 966

Some Explorations of the Synoptic and Dynamic Styles

Section A.19, "How Linguistics Can Help Writing and Reading Teachers"

CCCC, Washington, D.C., March 23, 1995

William J. Vande Kopple

Calvin College

In this paper, I will describe two areas related to the study of style that I have started some work in and move on to two sets of questions that others might wish to respond to. Both of these areas have been informed by the continuum that M.A.K. Halliday often uses when he works on matters of style or of modes of representing the world.

1. M.A.K. Halliday's Continuum of Linguistic Styles or Modes of Representing Experience

On one side of Halliday's continuum is a style that he labels synoptic. On the other side is a style that he calls dynamic. And between these two poles, he notes, are many mixed and intermediate kinds of style.

2. The Synoptic Style

In Halliday's terms, the synoptic style represents the world as a world of things, of products, of structures. This style is usually associated with carefully planned, formal writing. Writing, a thing or product, thus often tends to make the world look like itself.

The chief characteristic of the synoptic style is lexical density, which is the proportion of lexical or content words to the total discourse. I will calculate lexical density for texts as Halliday often does, by determining the ratio between the number of nouns, verbs, adjectives, and adverbs and the number of unembedded clauses. If you do not work in terms of unembedded clauses, you have to count some words twice, once for the overarching or matrix clause and once for the embedded clause.

One example of prose with a high degree of lexical density Halliday takes from Scientific American:

CS214548

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

W. Vande Kopple

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

> Private civil actions at law have a special significance in that they provide an outlet for efforts by independent citizens. Such actions offer a means whereby the multiple initiatives of private citizens, individually or in groups, can be brought to bear on technology assessment, the internalization of costs and environmental protection. They constitute a channel through which the diverse interests, outlooks and moods of the general public can be given expression.
>
> The current popular concern over the environment has stimulated private civil actions of two main types. (cited in Halliday, 1987b, p. 61)

Halliday computes the lexical density for this extract at 9.6 (lexical words) to 1 (unembedded clause).

Here is an additional example of some prose with a high degree of lexical density; this sentence, which comes from a medical journal, appears here with its lexical items underlined: "In conclusion, the administration of dexamethasone significantly reduced concentrations of protein and lactate and increased glucose concentrations in the cerebrospinal fluid approximately 24 hours after the beginning of treatment, and significantly reduced the incidence of moderate to profound bilateral sensorineural hearing impairment" (Lebel et al., 1988, p. 971). This sentence is made up of one main clause and contains twenty-seven lexical words (counting 24 as one lexical word); it, therefore, has a lexical density of 27 (lexical words) to 1 (unembedded clause).

Prose becomes lexically dense primarily via very complex noun phrases, structures that George W. Smith labels "writers' densely informative noun phrases" (1991, p. 84). Often the head noun in a noun phrase will be a nominalization, and the head can be both pre- and post-modified. In the last sentence of the example from Scientific American, there are two examples of nominalizations both pre- and post-modified: "The current popular **concern** over the environment" and "private civil **actions** of two main types."

3. The Dynamic Style

At the other end of Halliday's continuum is a style that he calls dynamic. It represents the

world in terms of happenings, processes, becomings. The dynamic style is usually associated with speech, especially with spontaneous and unselfconscious speech. This is the language "we learn as children--and carry with us throughout life" (Halliday, 1987a, p. 147). Often speech, an action or process, makes the world look like an action or process; in other words, it makes the world look like itself.

The chief characteristic of the dynamic style is grammatical intricacy. Sentences in the dynamic style will typically include many clauses, some hypotactically and some paratactically related to others. The more spontaneous and unselfconscious the speech, the more grammatically intricate it is likely to be. Sentences in this style can get so complex that sometimes those who utter them, on hearing them replayed, refuse to acknowledge that they did say them or even could have said them.

Halliday gives many examples of sentences in the dynamic style. Here is one recorded in the talk of a dog-breeder:

> I had to wait, I had to wait till it was born and till it got to about eight or ten weeks of age, then I bought my first dachshund, a black-and-tan bitch puppy, as they told me I should have bought a bitch puppy to start off with, because if she wasn't a hundred percent good I could choose a top champion dog to mate her to, and then produce something that was good, which would be in my own kennel prefix. (cited in Halliday, 1987b, p. 59)

Here is another such sentence, this one quoted in A Comprehensive Grammar of the English Language (1985):

> Although I know it's a bit late to call, seeing your light still on and needing to get your advice if you're willing to help me, I parked the car as soon as I could find a place and ventured to come straight up without ringing the bell because, believe me, I didn't want to add waking your baby to the other inconveniences I'm causing you. (1475)

Sentences such as these are not without lexical items. Since they contain several unembedded clauses, however, the ratio of lexical items to unembedded clauses remains quite low.

For example, Halliday computes the lexical density of the sentence from the dog-breeder at 1.8 (lexical words) to 1 (unembedded clause).

Halliday is quick to point out that between these two modes of representing experience "are many mixed and intermediate types" (1987b, p. 59). And, of course, one can find examples of spontaneous writing marked by grammatical intricacy and self-conscious speech marked by lexical density. What is most important to recall now is that with the synoptic and dynamic modes, writers have two very different ways of representing experience. Most aspects of experience can likely be represented in both ways, but some will probably be better represented in one than in the other. It does not make the best sense to think of writing as being more complex than unselfconscious speech. That writing often appears to be more complex rests on the fact that the speech that linguists have often analyzed in order to make these contrasts is not spontaneous and unselfconscious but planned and terribly self-conscious. Each mode of representing the world has its own kind of complexity. The complexity of the synoptic mode is that of structures, categories, hierarchies, and relationships between parts of such. This is the complexity of reflection. The complexity of the dynamic mode is that of processes, happenings, actions, and their conditions and results. This is the complexity of action.

4. The Synoptic Style Very Strongly Represented

One area that I have begun some stylistic investigation of is the area of scientific research reports, and thus far I have found the synoptic style very strongly represented in this writing. I have worked primarily with four research articles published in 1988; the authors and titles of these are as follows:

1. P. R. Blazewicz and J. C. Miller, "Nonlinear Optical Processes in Xenon and Krypton Studied by Two-Color Multiphoton Ionization," *Physical Review A* (3,977 words).

2. A. Kintanar, T. M. Alam, W. Huang, D. C. Schindele, D. E. Wemmer, and G. Drobny, "Solid-State ^{2}H NMR Investigation of Internal Motion in 2'-Deoxythymidine," *Journal of the American Chemical Society* (4,091 words).

3. E. H. De Lucia, W. H. Schlesinger, and W. D. Billings, "Water Relations and the Maintenance of Sierran Conifers on Hydrothermally Altered Rock," *Ecology* (3,461 words).

4. M. H. Lebel, B. J. Freij, G. A. Syrogiannopoulos, D. F. Chrane, M. J. Hoyt, S. M. Stewart, B. D. Kennard, K. D. Olsen, and G. H. McCracken, Jr., "Dexamethasone Therapy for Bacterial Meningitis," *New England Journal of Medicine* (4,267 words).

At this point, I do not have figures available on the lexical densities for these articles in their entireties, but I do have figures for their discussion sections. The average figure for the lexical densities of the discussion sections of these articles is 14.3 (lexical words) to 1 (unembedded clause). This is the highest figure for lexical density for fairly long passages (the average length for these four discussion sections is 861.5 words) that I have ever seen. In fact, it is not difficult to suppose that writing such as that in these articles lies close to the quintessence of the synoptic mode of representation.

It is particularly easy to suppose this after reviewing some of the individual sentences from these discussion sections. Here are three sample sentences, one from each of the articles in physics, chemistry, and ecology. In these sentences the lexical words are underlined (I count initialisms and hyphenated forms as one word):

1. "The ^{2}H NMR spectra of the variously selectively deuteriated deoxythymidines in this study indicate that there is not fast, large-amplitude, internal motion of the molecule, with the exception of the 3-fold jump of the methyl group about the C3 symmetry axis" (Kintanar et al., 1988, p. 6371) (lexical density = 23 : 1).

2. "Their observations include that of the production of tunable vuv light in the mildly, positively dispersive regions between adjacent three-photon resonances" (Blazewicz and Miller, 1988, p. 2869) (lexical density = 13 : 1).

3. "The ability of shrubs to maintain high conductances at low soil water potential would lead to depletion of water in the rooting zone of soils derived from unaltered rocks" (DeLucia, Schlesinger, and Billings, 1988, p. 309) (lexical density = 18 : 1).

5. Advantages of Such a Style

The synoptic mode of representation has several advantages for writers. As I noted earlier, this mode tends to make the world look like a thing or a product, not like a process. This tendency encourages reflection about and evaluation of the subject matter.

In addition, this mode allows for impersonal expressions of meaning when necessary. Someone could write The planning for the seminar in current approaches to functional semantics is complete without having to specify who did the planning.

Similarly, as Wells (1960) shows, a writer can avoid giving indications about tense. At the point of the compound's evaporation does not indicate when the compound evaporated, evaporates, or will evaporate. Such constructions can be useful in referring to recurring conditions or timeless truths.

But probably the primary advantage of the synoptic mode is that it allows those who are working within extensive networks of information that have been built up over time to communicate with one another efficiently. Synoptic representation provides writers with the means to refer to a great deal of information from earlier portions of a document and from earlier work. As Halliday points out, "when I can say 'the random fluctuations in the spin components of one of the two particles' I am packaging the knowledge that has developed over a long series of preceding arguments" (1987a, p. 149). And such packaging usually requires a surprisingly small amount of space; perhaps the most noticeable characteristic of the synoptic mode is the great amount of information it can express in a little space. Writers do not have to note every time "that particles spin, that they spin in three dimensions, that a pair of particles can spin in association with one another, that each one of the pair fluctuates randomly as it spins, and so on" (Halliday, 1987a, p. 149).

People who can work and write with advantages such as the synoptic style offers can make progress in a specific field. They can store up knowledge in texts about work that has already been done, they can refer relatively economically to this work, they may well be nudged to think of the

next step or steps in a research program, and they can get on with that research. As Halliday notes, with such advantages any given worker and discourse can start where others have left off (1987a, p. 149). That workers in scientific fields may have more reason than workers in other academic fields to find the advantages of the synoptic style especially attractive is underscored by the following claim by William D. Garvey: "More so than any other form of human creativity, scientific progress relates to, builds upon, extends, and revises existing knowledge" (1979, p. 14).

6. Some Potential Problems with or Questions About the Synoptic Style

In packaging up so much information in long and complex noun phrases, however, the synoptic style leaves many semantic relationships unexpressed. Those who have not followed the work and discourse in a field, therefore, may not understand sentences at all or may find them ambiguous. Consider the following sentence from the chemistry article: "Labile deuterons were reexchanged by lyophilizing from doubly distilled water three additional times" (Kintanar et al., 1988, p. 6368). Readers who have followed little such work might be completely mystified by this sentence. Readers who know a little more can wonder whether the deuterons were reexchanged from doubly distilled water, or whether the deuterons were reexchanged by one kind of lyophilizing, that is, lyophilizing from doubly distilled water. As it turns out, chemists who specialize in the area that Kintanar and his coauthors are writing about do not find this sentence ambiguous. For them the deuterons were reexchanged from doubly distilled water. They do not see the sentence as ambiguous because they know precisely what lyophilizing is--freeze-drying.

The synoptic style, then, has what Halliday calls an expert grammar (1987a, p. 149). If you are one of the experts in a field, you will face few problems with it. You will be able to understand the great amount of information expressed and identify the relationships that are left unexpressed. In fact, you probably will not have much more difficulty comprehending the synoptic style than you would comprehending the dynamic style. Perhaps you will even develop a specialized kind of reading process to use when working with material in the synoptic style. But if you are not one of the experts, you may well be shut out.

It is not the case that the synoptic style cannot be misused. Some misuses may cause nothing more serious than inconvenience or wasted time; others may cause serious harm. People can use it to give material an impersonal expression when it should not have such. People can use it to represent aspects of the world that perhaps are better represented with the dynamic mode. People can use it to try to present material as having synoptic complexity when in fact the material has no such complexity. People can use it to package up information to be taken for granted (by expressing that information in sentence subjects; see Vande Kopple, 1989) that really should not be taken for granted; the information deserves to be proposed and debated. People who are not really experts in an area can imitate the style with little appropriate substance in an attempt to pass themselves off as experts. And experts can use it to keep non-experts out of the experts' areas.

Considerations of both the proper uses and possible misuses of the synoptic style can lead composition teachers to many interesting questions: In how many other academic areas does this style make its presence strongly felt? In those other areas, is synoptic style prevalent for the reasons that it appears to be prevalent in scientific writing? Is it possible to teach someone how to write a heavily synoptic style? If it is possible, should teachers ever teach it to certain students? Is it possible that synoptic style will change as people's views of nature and the world change? Similarly, is it possible that the synoptic style will change as people's primary modes of communication change? These and similar questions should provide significant material to think about for those who theorize about composition and rhetoric, who teach English as a Second Language, and who teach English for Specific Purposes.

7. Does Dynamic Style Appear in Writing Produced in Academic Settings?

The other area that I have begun some work in centers on the question of whether any dynamic style appears in writing produced in academic settings. To approach this question, I decided to study a sample of what I for convenience will call basic writing.

The students who contributed essays to this sample were in one or the other of two special sections of freshman English that I taught at a four-year liberal-arts college. All of them had been

preselected for this class on the basis of their performance on a test that they took during their orientation period and that covered grammar, usage, punctuation, and rhetoric. They were all deemed to need more help with writing than would be available in a regular section of freshman English (most such sections have about twenty-three students). The institutional arrangement gave them extra help by holding these special classes to a maximum of seventeen students and mandating that the students also enroll in a non-credit half-course covering grammar, usage, and punctuation.

During the second class session for each of these special sections, I gave all the students an in-class writing assignment. None of them had ever seen the topic for the assignment before they walked into class. The topic was the one labelled Topic A by M. Morenberg, D. Daiker, and A. Kerek (1978), who had adapted it from the Educational Testing Service and had used it in sentence-combining research. Topic A reads as follows:

> Each of us behaves differently when we move from one group to another. We play different roles in different situations. For example, we do not act at home precisely as we act on dates, in the classroom, or before an employer. Nor do we behave with a single friend as we behave with a group of friends.
>
> In an extensive and detailed essay, develop your ideas about the changes in our behavior. Use specific illustrations from your own personal experience, from observations of others, or from books, movies, and television. You may want to explore questions of your own or answer questions like these: Why do we act differently in different situations? Are the changes in our behavior motivated by some need? Are other people misled by our behavior changes? Do such changes indicate something insincere or hypocritical about us? What happens when we do not change our behavior from one situation to another?

After I read this topic over with the students and answered their few questions, they had fifty minutes in which to think about the topic and respond to it in writing. Many of them were

finished with their essays before the fifty minutes had elapsed.

After the writing session, I had the essays coded and typed up, during which processes all spelling and mechanical errors were corrected "in an effort to eliminate the 'halo effect' of legible handwriting and technical correctness on raters' judgments" (Gebhard, 1978, p. 212). Then I asked three of my colleagues to grade the essays as they would have if the essays had been submitted to them for credit in freshman English. When they were finished, I averaged the grades each essay had received and sorted out the fifteen with the lowest average grades. The average grade for these fifteen was a D+.

Some data on the writers of these fifteen essays, all of whom spoke English as their first language, were available. Scores on the English section of the American College Test were available for ten students. Their average standard score was 14.1. The local percentiles for these ten students were as follows: 05, 24, 19, 08, 30, 01, 05, 14, 01, and 05. Scores on the verbal section of the Scholastic Aptitude Test were available for two students. Both had a standard score of 310; the two local percentiles were 04 and 02. The average grade for twelve of these students in all of their high-school English classes was between a C and a C-.

When I examined the sentences in their essays in terms of kinds of possible complexity, I found that many of the basic writers' sentences display neither of the kinds of complexity associated with the synoptic or dynamic style; they are neither lexically dense nor grammatically intricate. They are sentences such as the following:

1. "I also am different in the classroom."
2. "My friend of ten acts snobbishly and mean to her parents."
3. "So he has to change his behavior to suit others' needs."
4. "But basically I'm more of a quiet person."
5. "Well, it is not good."
6. "Like my friend, she is sweet and quiet around me."

These sentences obviously have simple structures, and that is not necessarily bad. But if

an essay contained only such sentences, many readers would raise questions about it. With so little complexity in its constituent sentences, such an essay would be unlikely to represent complex meanings adequately.

But some of the basic writers' sentences displayed complexity, and it was the complexity of the dynamic style. They are sentences such as these, no two of which were written by the same writer:

1. "If everyone tried to please everyone else, we would all be boring, because no one would have a distinct personality, because everyone would be behaving the same way."

2. "I go to work, I do my job, which is a lot, plus I have to do at least one-half of their job, which really ticks me off because I have to stay to finish my job."

3. "I remember sometimes when I go out with my girlfriend I would be in a grouchy mood before I get to her house, and once I get to her house I'm in a great mood."

4. "When you have associated with all kinds of people, especially those of bad background, you have to act differently because it is essential to not act this way with the high society."

5. "If you are with a close friend you have had for years, you get into a form or groove with that person and you know what to expect from him and he knows what to hear and expect from you."

6. "When I am with a group of friends I tend to go along with the group and follow the general opinion of what to do next, but if I am with just one friend, I tend to do whatever I or my friend wants to do."

None of these sentences is as complex as the examples of the dynamic style presented earlier. But these are well along Halliday's continuum in the direction of such sentences. These sentences contain several clauses, some paratactically and some hypotactically related to others.

As these sentences indicate to an extent, the basic writers in the sample filled their essays with narratives. Some writers formed their entire essays out of one long narrative. Others strung

several shorter narratives or anecdotes together. It should be no surprise, then, that of the 263 total grammatical subjects in the sample, 189 (71.86%) refer to plausible agents. These particular subjects are elements like I, my friends, and my boyfriend, not elements like this essay, such behavior, and a need to change your behavior, all of which would not be likely to play the role of agent in sentences.

There is only a hint of the synoptic style in the sample. A few sentences have the characteristics of the synoptic, but only a few, and the characteristics are not well developed. These sentences are as follows:

1. "Maybe it is lack of love at home or insecurity."
2. "Changes in a person's behavior may be motivated by some need."
3. "Changes in my behavior pattern from group to group are normal and healthy for me."

I also analyzed the lexical density of a subset of the essays in the sample. I excluded the five shortest and the five longest essays and focused on the five of medium lengths. In these five I found 570 lexical words and 124 unembedded clauses, figures which produced a small lexical density ratio of 4.6 (lexical words) : 1 (unembedded clause).

It appears, then, that to the extent that these writers incorporated complexity in their sentences, it was the complexity associated with the dynamic style. The complexity that appears in their essays is not as pronounced as that in much of the talk of unselfconscious speakers. But this complexity is somewhat unusual for writing, especially for writing which, because it was assigned for an academic class, could be viewed as somewhat formal. To a degree, then, these students wrote in response to the writing assignment as they perhaps speak in natural situations.

8. Some Questions About the Basic Writers and Their Essays

At this point, it is important to address the second set of questions that I alluded to above--questions about the basic writers and their writing. First, can it be proved that these writers wrote as they did because it was impossible for them to do otherwise? In other words, did they use the dynamic style to recount narratives and anecdotes because that is the only mode of representing

meanings that is available to them? The answer to this question is no. Perhaps the impromptu nature of the task or the topic for their essays led these writers to respond to the task in the form of narratives conveyed in the dynamic style. Although some of the clauses explaining the topic could be viewed as leading naturally to a classification or a taxonomy in their focus on such phenomena as "changes in our behavior," many others could be seen as leading naturally to anecdotes and short narratives in their questions about how "we behave" or how "we play different roles in different situations."

Second, can it be proved that most or all students who get classified as basic writers would respond to the writing assignment in a way similar to that of the basic writers represented here? Again the answer is no. These fifteen writers could differ in significant ways from other basic writers.

Finally, can it be proved that the basic writers' responses would differ significantly from those of first-year students in regular composition classes, at my institution or elsewhere? On the basis of the data available, once more the answer is no. Obviously, a good deal of additional research is needed before anyone could approach answering these three questions affirmatively.

This preliminary work, however, raises the possibility that some college students, without kinds of special help, will not be able to move very far along the stylistic continuum toward the synoptic style in their writing. Or this work raises the possibility that some students may have very little sense about when the two styles as well as styles lying somewhere between the two are functionally appropriate. And the seriousness of these possibilities, I believe, justifies some thinking on the part of literacy scholars about what might lie behind these possibilities and about what would be necessary to enable such students to do the kind of scholarly work that seems to correlate highly with the synoptic style. (I will leave for future research the complex questions about how one can best learn to read synoptic style and about how learning to read synoptic style affects learning to write it.) In calling for others to focus on this matter, in part I am reacting to the notes that have been sounded in the last several years (see especially Stotsky, 1986) to the effect

that many basic writers tend to respond to writing assignments by focusing on themselves, not by reflecting on ideas. If writers happen to be limited to the kind of thinking that seems to correlate with the dynamic mode of representation, I suspect that the challenges these students will face in trying to write certain kinds of academic discourse will be enormous. Therefore, what to do about such potential challenges probably deserves to be at the center of discussions among teachers of reading and writing.

References

Blazewicz, P. R., & Miller, J. C. (1988). Nonlinear optical processes in xenon and krypton studied by two-color multiphoton ionization. Physical Review A, 38, 2863-2870.

DeLucia, E. H., et al. (1988). Water relations and the maintenance of Sierran conifers on hydrothermally altered rock. Ecology, 68, 303-311.

Garvey, W. D. (1979). Communication: The essence of science. Oxford: Pergamon Press.

Gebhard, A. O. (1978). Writing quality and syntax: A transformational analysis of three prose samples. Research in the Teaching of English, 12, 211-231.

Halliday, M.A.K. (1987a). Language and the order of nature. In N. Fabb, et al. (Eds.), The linguistics of writing, arguments between language and literature (pp. 135-154). New York: Methuen.

Halliday, M.A.K. (1987b). Spoken and written modes of meaning. In R. Horowitz & S. J. Samuels (Eds.), Comprehending oral and written language (pp. 55-82). New York: Academic Press.

Kintanar, A., et al. (1988). Solid-state ^{2}H NMR investigation of internal motion in 2'-deoxythymidine. Journal of the American Chemical Society, 110, 6367-6372.

Lebel, M. H., et al. (1988). Dexamethasone therapy for bacterial meningitis. New England Journal of Medicine, 319, 964-971.

Morenberg, M., Daiker, D., & Kerek, A. (1978). Sentence combining at the college level: An experimental study. Research in the Teaching of English, 12, 245-256.

Quirk, R., et al. (1985). A comprehensive grammar of the English language. New York: Longman.

Smith, G. W. (1991). Computers and human language. New York: Oxford University Press.

Stotsky, S. (1986). On Learning to Write About Ideas. College composition and

communication, 37, 276-293.

Vande Kopple, W.J. (1989). Clear and coherent prose, a functional approach. Glenview, IL: Scott, Foresman.

Wells, R. (1960). Nominal and verbal style. In T.A. Sebeok (Ed.), Style in Language (pp. 213-220). Cambridge, MA: The M.I.T. Press.